

the fog comprising the composition to be coated envelopes the person P and is uniformly deposited on all or part of the body of the person P.

A filter 116 is normally positioned as shown in full lines in FIG. 13. This allows air and fog entrained therein to move around the circular path as identified by the arrows in FIG. 13 under the action of the fan 110. Whenever a particular coating operation has been completed, a fluid powered cylinder 118 is actuated to pivot the filter 116 into the position illustrated in dashed lines in FIG. 13. The fan 110 continues to operate thereby causing the fog entrained in the moving air to be captured by the filter 116. After all of the fog has been captured by the filter 116, the apparatus 100 is ready for a subsequent coating operation.

Referring to FIG. 14, there is shown an apparatus for coating all or part of the human body 130 comprising the variation of the apparatus 100 shown in FIG. 13 and described hereinabove in connection therewith. The apparatus 130 comprises a housing 132 having a barrier 134 disposed therein. One or more fogging nozzles 136 are positioned in the upper portion of the housing 132. In use, the fogging nozzles 136 function to generate a fog comprising a composition to be coated on all or part of the human body.

A fan is positioned within the housing 132 and functions to cause air to flow through the housing 132 and around the barrier 134 in the direction of the arrows shown in FIG. 14. The fog comprising the composition to be coated which is generated by the fogging nozzles 136 is entrained in the moving air and is transported thereby through the housing 132 in the direction of the arrows. Any droplets emanating from the fogging nozzles 136 which are too large and/or too heavy for entrainment in the moving air are captured by an absorbent filter 142.

A door 143 provides access to a coating zone 144 situated within the housing 132. The fog comprising the composition to be coated passes through the coating zone 144 under the action of the fan 140, thereby completely enveloping the body of a person P situated within the coating zone. In this manner, the composition comprising the fog generated by the fogging nozzles 136 is uniformly distributed over all or part of the body of the person P situated within the coating zone 144.

At the end of a coating session, excess fog, that is, coating composition which was not received on the body of the person P, is directed into an absorbent filter 146 under the action of an exhaust fan 148. After the interior of the housing 132 has been cleared of excess coating composition, the apparatus 130 is ready for a subsequent coating operation.

Referring to FIG. 15, there is shown an apparatus for coating all or part of a human body 160. The apparatus 160 incorporates numerous component parts which are substantially identical in construction and function to component parts of the apparatus 130 illustrated in FIG. 14 and described hereinabove in conjunction therewith. Such identical component parts are designated in FIG. 15 with the same reference numerals utilized above in the description of the apparatus 130.

The apparatus 160 differs from the apparatus 130 in that the fogging nozzles 136 of the apparatus 160 are mounted on vertically oriented tubular columns 162. The columns 162

are supported for pivotal movement about vertical axes, and are interconnected by a linkage 164. The linkage 164 is operated by an actuator 166 which functions to continuously pivot the columns 162 and the fogging nozzles 136 carried thereby back and forth about their respective vertical axes. Thus, the actuator 166 and the linkage 164 operate similar to the cylinder 38 and the linkage 40 of FIG. 10.

In the operation of the apparatus 160, the fan 140 circulates air through the housing 132 and around the barrier 134 in the direction of the arrows of FIG. 15. The fogging nozzles 136 function to generate a fog comprising a composition to be coated on all or part of the human body. The fog is entrained in the moving air and is transported thereby through the housing 132.

As the fogging nozzles 136 function to generate a fog from the coating composition, the fogging nozzles 136 are pivoted in horizontal planes by the actuator 166, the linkage 164, and the vertically disposed columns 162. In this manner the initial distribution of the fog generated by the fogging nozzles 136 is turbulent rather than linear. Turbulence of the fog within the coating zone 144 of the housing 132 is beneficial in that it further assures a uniform distribution of the coating composition over all or part of the body of a person situated within the coating chamber.

Although preferred embodiments of the invention are illustrated in the Drawings and described in the Detailed Description, it will be understood that the invention is not limited to the embodiments disclosed, but is capable of numerous modifications and rearrangements of parts and elements without departing from the spirit of the invention.

**What is claimed is:**

1. An apparatus for coating at least a portion of the human body with a predetermined coating composition comprising: an enclosed coating chamber for receiving a person to be coated; at least one fan for directing a flow of air through the coating chamber; at least one fogging nozzle for forming the predetermined coating composition into a fog comprising droplets sufficiently small in size and light in weight for entrainment in the air flow caused by the fan and for circulation by the flowing air through the coating chamber and onto the skin of a person situated therein; and at least one filter for capturing fog generated by the fogging nozzle which is not received on the skin of the person situated within the coating chamber.
2. The apparatus according to claim 1 further including an absorbent filter positioned to receive droplets emanating from the fogging nozzle which are too large for entrainment in the flowing air.
3. The apparatus according to claim 1 wherein the coating composition is a predetermined suntanning composition.
4. The apparatus according to claim 1 wherein the coating composition is a predetermined tanning accelerator composition.
5. The apparatus according to claim 1 wherein the coating composition is a predetermined sunburn treatment composition.
6. The apparatus according to claim 1 wherein the coating composition is a predetermined insect repellent composition.
7. The apparatus according to claim 1 wherein the coating composition is a predetermined skin toner composition.

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8. The apparatus according to claim 1 wherein the coating composition is a predetermined skin bleach composition.

9. The apparatus according to claim 1 wherein the coating composition is a predetermined skin lightening composition.

10. The apparatus according to claim 1 wherein the coating composition is a predetermined anti-microbial composition.

11. The apparatus according to claim 1 wherein the coating composition is a predetermined moisturizer composition.

12. The apparatus according to claim 1 wherein the coating composition is a predetermined exfoliant composition.

13. The apparatus according to claim 1 wherein the coating composition is a predetermined nutrient and vitamin composition.

14. The apparatus according to claim 1 wherein the coating composition is a predetermined massaging aide composition.

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15. The apparatus according to claim 1 wherein the coating composition is a predetermined muscle relaxant composition.

16. The apparatus according to claim 1 wherein the coating composition is a predetermined medicated skin treatment composition.

17. The apparatus according to claim 1 wherein the coating composition is a predetermined burn treatment composition.

18. The apparatus according to claim 1 wherein the coating composition is a predetermined decontamination composition.

19. The apparatus according to claim 1 wherein the coating composition is a predetermined cosmetic composition.

20. The apparatus according to claim 1 wherein the coating composition is a predetermined wrinkle treatment composition.

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